



SEQUENCE LISTING

<110> Consortium fuer elektrochemische Industrie GmbH

<120> Feedback-resistant Homoserine-Transsuccinylases

<130> CO-P#####

<140>

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<160> 12

<170> PatentIn Ver. 2.0

<210> 1

<211> 930

<212> DNA

<213> Escherichia coli

<220>

<221> CDS

<222> (1)..(930)

<300>

<301> Blattner, F. R.

<302> The complete genome sequence of Escherichia coli K-12.

<303> Science

<304> 277

<305> 5331

<306> 1453-1474

<307> 1997

<400> 1

atg ccg att cgt gtg ccg gac gag cta ccc gcc gtc aat ttc ttg cgt 48

Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg

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gaa gaa aac gtc ttt gtg atg aca act tct cgt gcg tct ggt cag gaa 96

Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu

20 25 30

att cgt cca ctt aag gtt ctg atc ctt aac ctg atg ccg aag aag att 144

Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile

35 40 45

gaa act gaa aat cag ttt ctg cgc ctg ctt tca aac tca cct ttg cag 192
Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln
50 55 60

gtc gat att cag ctg ttg cgc atc gat tcc cgt gaa tgc cgc aac acg 240
Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr
65 70 75 80

ccc gca gag cat ctg aac aac ttc tac tgt aac ttt gaa gat att cag 288
Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln
85 90 95

gat cag aac ttt gac ggt ttg att gta act ggt gcg ccg ctg ggc ctg 336
Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu
100 105 110

gtg gag ttt aat gat gtc gct tac tgg ccg cag atc aaa cag gtg ctg 384
Val Glu Phe Asn Asp Val Ala Tyr Trp Pro Gln Ile Lys Gln Val Leu
115 120 125

gag tgg tgc aaa gat cac gtc acc tgc acg ctg ttt gtc tgc tgg gcg 432
Glu Trp Ser Lys Asp His Val Thr Ser Thr Leu Phe Val Cys Trp Ala
130 135 140

gta cag gcc gcg ctc aat atc ctc tac ggc att cct aag caa act cgc 480
Val Gln Ala Ala Leu Asn Ile Leu Tyr Gly Ile Pro Lys Gln Thr Arg
145 150 155 160

acc gaa aaa ctc tct ggc gtt tac gag cat cat att ctc cat cct cat 528
Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His
165 170 175

gcg ctt ctg acg cgt ggc ttt gat gat tca ttc ctg gca ccg cat tgc 576
Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser
180 185 190

cgc tat gct gac ttt ccg gca gcg ttg att cgt gat tac acc gat ctg 624
Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu
195 200 205

gaa att ctg gca gag acg gaa gaa ggg gat gca tat ctg ttt gcc agt 672
Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser
210 215 220

aaa gat aag cgc att gcc ttt gtg acg ggc cat ccc gaa tat gat gcg 720
Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala
225 230 235 240

caa acg ctg gcg cag gaa ttt ttc cgc gat gtg gaa gcc gga cta gac 768
Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp
245 250 255

ccg gat gta ccg tat aac tat ttc ccg cac aat gat ccg caa aat aca 816
Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr
260 265 270

ccg cga gcg agc tgg cgt agt cac ggt aat tta ctg ttt acc aac tgg 864
Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp
275 280 285

ctc aac tat tac gtc tac cag atc acg cca tac gat cta cgg cac atg 912
Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met
290 295 300

aat cca acg ctg gat taa 930
Asn Pro Thr Leu Asp
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<211> 309

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<213> Escherichia coli

<400> 2

Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg
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Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu
20 25 30

Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile
35 40 45

Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln
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Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr
65 70 75 80

Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln
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Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu
100 105 110

Val Glu Phe Asn Asp Val Ala Tyr Trp Pro Gln Ile Lys Gln Val Leu
115 120 125

Glu Trp Ser Lys Asp His Val Thr Ser Thr Leu Phe Val Cys Trp Ala
130 135 140

Val Gln Ala Ala Leu Asn Ile Leu Tyr Gly Ile Pro Lys Gln Thr Arg
145 150 155 160

Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His
165 170 175

Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser
180 185 190

Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu
195 200 205

Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser
210 215 220

Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala
225 230 235 240

Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp
245 250 255

Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr
260 265 270

Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp
275 280 285

Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met
290 295 300

Asn Pro Thr Leu Asp
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<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence:
Oligonucleotide metAfw

<400> 3
gatcccatgg ctccttttag tcattcttat 30

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metArev

<400> 4
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<210> 5
<211> 33
<212> DNA
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GAPDHfw

<400> 5
gtcgacgcgt gaggcgagtc agtcgcgtaa tgc 33

<210> 6
<211> 42 n=1:1:1:1 mixture of A,T,C and G.
<212> DNA
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catggctcct ttagtcatt cttatattct aacgtag 37

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<211> 47

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acgcgtatgc atccagagct cagtactatt aatccagcgt tggattc 47

<210> 9

<211> 25

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Oligonucleotide
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nnncagatca cgccatacga tctac

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<210> 10

<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Oligonucleotide
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<400> 10

gacgtaatag ttgagccagt tgg

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<210> 11

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Oligonucleotide
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<400> 11

nnnggttga ttgtaactgg tgcg

24

<210> 12

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Oligonucleotide
metAmutrev2

<400> 12

aaagttctga tctgaatat c

21